

REMARKS/ARGUMENTS

Prior to the entry of this Amendment, claims 1-37 were pending in this application. Claims 1, 3, 13, 21, 24, and 31-37 have been amended, no claims have been canceled, and no claims have been added herein. Therefore, claims 1-37 remain pending in this application. Applicant respectfully requests reconsideration of these claims for at least the reasons presented below.

35 U.S.C. § 102 Rejection, Mullins

The Office Action has rejected claims 1, 10-13, 21, 24, 26-28, 31 and 33-35 under 35 U.S.C. 102(e) as being anticipated by U. S. Patent No. 6,985,912 to Mullins et al. (hereinafter Mullins). The Applicant respectfully submits the following arguments pointing out significant differences between claims 1, 10-13, 21, 24, 26-28, 31 and 33-35 submitted by the Applicant and Mullins.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Applicant respectfully argues that Mullins fails to disclose each and every claimed element. For example, Mullins fails to disclose, either expressly or inherently, a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute.

Mullins "relates in general to enhancing database access and performance when correlating or translating one database to another database or to an object programming application." (Col. 1, lines 13-16) Mullins references "a mapping system for handling data requested by an object software application model in a manner that is compatible with relational

data stores." (Col. 7, lines 28-31) "The mapping information can be used to map from objects to relational models or vice versa, objects to objects, object to COBAL or vice versa, and object to XML and the like." (Col. 7, lines 41-44) More specifically, Mullins describes a mapping system that includes "data in the first database format stored in the system; rules for translating from the first format to the second format stored as a separate structure from the data; and means for applying the rules to the data to obtain the second format." (Col. 13, lines 13-17) That is, the rules of Mullins define the relationships between the objects and the database (Col. 13, lines 40-48). However, Mullins does not disclose a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute.

Claim 1, upon which claims 2-12 depend, claim 13, upon which claims 14-20 depend, and claim 21, upon which claims 22 and 23 depend, each recite in part accessing a mapping catalog customizable for a relational database schema, said mapping catalog identifies one or more portions of one or more tables in a relational database that stores said data for said one or more attributes and a classification for each of the one or more of the attributes, said relational database corresponds to said relational database schema; translating at least a portion of said request from said first data format to a form suitable for said relational database, said step of translating is based on said classification of each attribute. Mullins does not disclose a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute. Rather, Mullins discloses a set of rules that define relationships between objects and a database but fail to mention classifications for attributes or translating based on these classifications.

Similarly, claim 24, upon which claims 25-30 depend, and claim 31, upon which claims 32-37 depend, both recite in part a mapping catalog identifying one or more portions of one or more tables in a relational database that stores data for one or more attributes and a

classification for each of the one or more attributes; and a translation module receiving access request information from said data source interface and mapping information from said mapping catalog, said access request information pertains to data for the one or more attributes, said translation module translates said request information from a first form to a second form suitable for the relational database based on said mapping information from said mapping catalog including said classification. Mullins does not disclose a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute. Rather, Mullins discloses a set of rules that define relationships between objects and a database but fail to mention classifications for attributes or translating based on these classifications.

For at least the previous reasons, claims 1, 10-13, 21, 24, 26-28, 31 and 33-35 are thought to be patentable over Mullins. Therefore, Applicant respectfully request withdrawal of the rejection and allowance of the claims.

35 U.S.C. § 103 Rejection, Mullins in view of Durand

The Office Action has rejected claims 2, 3, 5, 6, 14, 15, 17, 25, 29, 32 and 36 under 35 U.S.C. § 103(a) as being unpatentable over Mullins in view of U. S. Patent No. 5,694,598 to Durand et al. (hereinafter Durand). The Applicant respectfully submits that the Office Action does not establish a *prima facie* case of obviousness in rejecting these claims. Therefore, the Applicant requests reconsideration and withdrawal of the rejection.

In order to establish a *prima facie* case of obviousness, the Office Action must establish: 1) some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or combine their teachings; 2) a reasonable expectation of success of such a modification or combination; and 3) a teaching or suggestion in the cited prior art of each claimed limitation.

See MPEP §706.02(j). As will be discussed below, the references cited by the Office Action do not teach or suggest each claimed limitation. For example, the cited references do not teach or suggest, alone or in combination, classifying attributes based on column and table in a relational database format and using the classifications to translate between the data formats. Furthermore, the references do not teach or suggest each classification being translated differently.

As discussed above, Mullins does not teach or suggest a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute. Rather, Mullins discloses a set of rules that define relationships between objects and a database but fail to mention classifications for attributes or translating based on these classifications.

Durand "relates to methods for mapping data between an object-oriented data model and a relational data model." (Col. 1, lines 8-10) Durand discloses a method of mapping from a plurality of objects to a relational database that includes generating and populating a transit object with data from the objects, populating a data structure with the information from the transit object, and finally populating the relational database based on the structure. (Col. 3, lines 1-21) Durand's method of mapping from the relational database to the objects is essentially the reverse process, i.e., populating the data structure with information from the relational database, populating the transit object based on the data structure, and populating the objects with data from the transit object. (Col. 3, lines 22-39) However, Durand does not teach or suggest a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute.

Claim 1, upon which claims 2-12 depend, claim 13, upon which claims 14-20 depend, and claim 21, upon which claims 22 and 23 depend, each recite in part accessing a mapping catalog customizable for a relational database schema, said mapping catalog identifies

one or more portions of one or more tables in a relational database that stores said data for said one or more attributes and a classification for each of the one or more of the attributes, said relational database corresponds to said relational database schema; translating at least a portion of said request from said first data format to a form suitable for said relational database, said step of translating is based on said classification of each attribute. Neither reference, alone or in combination, teaches or suggests a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute.

Similarly, claim 24, upon which claims 25-30 depend, and claim 31, upon which claims 32-37 depend, both recite in part a mapping catalog identifying one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more attributes; and a translation module receiving access request information from said data source interface and mapping information from said mapping catalog, said access request information pertains to data for the one or more attributes, said translation module translates said request information from a first form to a second form suitable for the relational database based on said mapping information from said mapping catalog including said classification. Neither reference, alone or in combination, teaches or suggests a mapping catalog that identifies one or more portions of one or more tables in a relational database that stores data for one or more attributes and a classification for each of the one or more of the attributes and translating based on the classification of each attribute.

For at least the previous reasons, claims 2, 3, 5, 6, 14, 15, 17, 25, 29, 32 and 36 are thought to be patentable over the combination of Mullins and Durand. Therefore, Applicant respectfully request withdrawal of the rejection and allowance of the claims.

35 U.S.C. § 103 Rejection, Mullins in view of Bachmann

The Office Action has rejected claims 4, 16, 30, and 37 under 35 U.S.C. § 103(a) as being unpatentable over Mullins in view of U. S. Patent No. 6,085, 188 to Bachmann et al. (hereinafter Bachmann). Applicant respectfully requests withdrawal of the rejection and allowance of the claims for at least the reason that claims 4, 16, 30, and 37 each depend upon base claims that are thought to be allowable as discussed in detail above.

35 U.S.C. § 103 Rejection, Mullins in view of Shen

The Office Action has rejected claims 7-9 and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over Mullins in View of U. S. Patent No. 5,596,746 to Shen et al. (hereinafter Shen). Applicant respectfully requests withdrawal of the rejection and allowance of the claims for at least the reason that claims 7-9 and 18-20 each depend upon base claims that are thought to be allowable as discussed in detail above.

35 U.S.C. § 103 Rejection, Mullins in view of Durand and further in view of Bachmann

The Office Action has rejected claim 22 under 35 U.S.C. § 103(a) as being unpatentable over Mullins in view of Durand and further in view of Bachmann. Applicant respectfully requests withdrawal of the rejection and allowance of the claims for at least the reason that claim 22 depends upon a base claim that is thought to be allowable as discussed in detail above.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

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PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



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